



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,873	04/03/2001	Alan Gary Blahey	P1998J096	6495

27810 7590 11/19/2002

EXXONMOBIL RESEARCH AND ENGINEERING COMPANY  
P.O. BOX 900  
1545 ROUTE 22 EAST  
ANNANDALE, NJ 08801-0900

EXAMINER	
TOOMER, CEPHIA D	
ART UNIT	PAPER NUMBER

1714

DATE MAILED: 11/19/2002

//

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/806,873

Applicant(s)

BLAHEY ET AL.

Examiner

Cephia D. Toomer

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on 27 August 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,4-6 and 9-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-6 and 9-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1714

### DETAILED ACTION

This Office action is in response to the amendment filed August 7, 2002 in which claims 1 and 6 were amended.

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 4-6 and 9-14 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original specification does not support an ash content of about 0.1 to about 0.6 wt %. The table at page 2 supports 0.1-0.6 wt %.

#### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 4-6 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blahey (5,726,133).

Art Unit: 1714

Blahey teaches a low ash natural gas engine oil and additive system comprising a lubricating oil basestock having a kinematic viscosity at 100 °C of about 5 to 16 cSt, a minor amount of a detergent comprising a mixture of a low TBN alkali or alkaline earth metal salt and at least one more neutral alkali or alkaline earth metal salt, a viscosity index improver and a phenolic antioxidant (see abstract; col. 2, lines 1-11, 25-27). The first detergent has a TBN of about 250 and the second detergent has a TBN that is about half of the first detergent and the mixture contributes a sulfated ash amount of 0.1 to 0.6% (see col. 2, lines 31-67; col. 3, lines 1-9). The lubricating oil may be a mixture of hydrocrackate and solvent refined oils (see col. 3, lines 14-20, 46-58). The phenolic antioxidant is present in the composition in an amount from 0.05 to 1.5 vol.%, the viscosity index improver is present in an amount up to 15 vol % (see col. 4, lines 27-35, 58-67) and the antiwear agent is present in an amount from about 0.05 to 1.5 vol. % (see col. 4, lines 42-48). The compositions exemplified in table 1 have a KV of 13.5 at 100 °C. Blahey teaches the limitations of the claims other than the differences that are discussed below.

In the first aspect, Blahey differs from the claims in that he does not specifically teach that the basestock does not contain an oil having a viscosity of 20 cSt or higher. However, it is well settled that the omission of a component and its function from a combination is an obvious expedient if the remaining components perform the same function as before. *In re Karlson*, 136 USPQ 184; *In re Wilson*, 153 USPQ 340; *In re Marzocchi*, 173 USPQ 228.

Art Unit: 1714

In the second aspect, Blahey differs from the claims in that he does not specifically teach that the viscosity of the engine oil is increased to about 13.2 cSt at 100 °C. However, a prima facie case of obviousness exists where the claimed ranges and the prior art do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corps v. Banner*, 227 USPQ 773 (Fed. Cir. 1985). Also, the claim language about 13.2 cSt reads on the viscosity of 13.5 cSt taught by Blahey.

5. Claims 1, 4-6, 9, 10, 12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue (US 5,744,430).

Inoue teaches an engine oil composition which has a lower viscosity and a long lifetime (see col. 1, lines 25-41). The composition comprises a base oil having a kinematic viscosity of from 2 to 8 mm<sup>2</sup>/s at 100 °C and is selected from mineral oil (solvent refined), synthetic and mixtures thereof (see col. 1, lines 60-63; col. 2, lines 55-56; col. 3, lines 1-5); a phenol ashless antioxidant in an amount from 0.1-3% by weight (see col. 2, lines 9-10; col. 5, lines 21-65); a viscosity index improver in an amount from 1 to about 10% by weight (see col. 2, lines 15-17; col. 7, lines 3-26); an alkaline earth metal salicylate detergent having a TBN from 60 to 350 (see abstract; col. 3, lines 54-57). The salicylate may be neutral or overbased (col. 3, lines 17-24). This teaching in view of *In re Kerkhoven*, 205 USPQ 1069 (CCPA 1980) (MPEP 2144.06) (combining two components each having the same function) suggests a mixture of the two salicylates. Inoue also teaches that the composition contains from 0.1-15 % antiwear

Art Unit: 1714

agents (see col. 9, lines 59-65; col. 10, lines 27-28). Inoue teaches the limitations of the claims other than the differences that are discussed below.

Inoue fails to teach that the base oil possesses a KV of between 9 to 13 cSt. However, a prima facie case of obviousness exists where the claimed ranges and the prior art do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corps v. Banner* 227 USPQ 773 (Fed. Cir. 1985). The claimed KV of 9 cSt is close enough to the KV of Inoue's oil ( 8 cSt) that one skilled in the art would expect that the oils would have the same properties.

Inoue prefers to keep the viscosity of the oil of his invention in the range of 5.6 to 12.5 cSt whereas the viscosity of the oil of the present invention has a viscosity of about 13.2 cSt.

A prima facie case if obviousness exists where the claimed ranges and the prior art do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. *Titanium Metals Corps v. Banner* 227 USPQ 773 (Fed. Cir. 1985). The claim language about 13.2 cSt reads on Inoue's oil which has a KV of 12.5.

6. The 103 rejection of the claims over Vienna/Mortier is withdrawn in view of the amendment to the claims and Applicant's arguments.

7. Applicant's arguments filed have been fully considered but they are not persuasive.

Applicant argues that Blahey uses up to 15 vol% viscosity index improvers and a base oil that has a viscosity of 20.8 cSt at 100 °C. Applicant argues that this amount of viscosity index improver is too high and that the present invention excludes base oils that have a viscosity greater than 20 cSt.

Blahey does teach that up to 15 vol. % of viscosity index improver may be present in his invention; however, it is clear that less may be used because his preferred upper limit is 10 vol % (see col. 4, lines 58-67).

Blahey is not limited to oils whose viscosity is greater than 20 cSt because at col. 3, lines 10-13, Blahey teaches that he prefers that the basestock have a kinematic viscosity at 100 C of about 5 to 16 cSt (see col. 3, lines 10-13). Regarding the oils of the examples, it is well settled that that a reference must be considered in its entirety and is not limited to specific working examples contained therein. *In re Fracalossi*, 215 USPQ 569 (CCPA 1982). It is also well settled that the omission of a component and its function from a combination is an obvious expedient if the remaining components perform the same function as before. *In re Karlson*, 136 USPQ 184; *In re Wilson*, 153 USPQ 340; *In re Marzocchi*, 173 USPQ 228. Furthermore, all of Applicant's examples contain 1200N base oil.

Applicant argues that Inoue discloses an oil having a viscosity of 2-8 mm<sup>2</sup>/s that is increased to 5.6-12.5 mm<sup>2</sup>/s, whereas the present invention is claiming an oil having a viscosity of 9-13 cSt that is increased to about 13.2 cSt.

Just as the oils of the present invention, the oil compositions taught by Inoue also have a long lifetime (see col. 1, lines 50-54). Therefore, even though the viscosity

Art Unit: 1714

ranges do not overlap, they are close enough that one skilled in the art would expect them to have the same properties.

Applicant argues that Inoue teaches the presence of a major amount of viscosity index improver in the composition, up to 10%, whereas the present invention only contains a minor amount.

Inoue teaches that the viscosity index improver is present in an amount from about 1 to about 10%. This range overlaps the range disclosed in the specification at page 10, third paragraph.

Applicant argues that all components must be present in the composition of Inoue and in their specified amounts in order for Inoue to achieve a synergistic effect.

The examiner maintains that while the ranges of the components and resulting viscosity do not overlap, they are close enough that one skilled in the art would expect them to have the same properties.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any




Art Unit: 1714

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cephia D. Toomer whose telephone number is 703-308-2509. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Cephia D. Toomer  
Primary Examiner  
Art Unit 1714

09806873\11  
November 15, 2002